

THE LEADER IN ENVIRONMENTAL TESTING

# **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc.

TestAmerica Nashville 2960 Foster Creighton Drive Nashville, TN 37204 Tel: (615)726-0177

TestAmerica Job ID: 490-26469-1 Client Project/Site: Everett Terminal

### For:

Exxon Global Remed. Grp 52 Beacham Street Everett, Massachusetts 02149

Attn: Mr. Ernest E Haynes



Authorized for release by: 5/28/2013 4:58:04 PM

Gail Lage, Senior Project Manager gail.lage@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

# **Table of Contents**

| Cover Page            | 1  |
|-----------------------|----|
| Table of Contents     | 2  |
| Sample Summary        | 3  |
| Case Narrative        | 4  |
| Definitions           | 5  |
| Client Sample Results | 6  |
| QC Sample Results     | 11 |
| QC Association        | 18 |
| Chronicle             | 20 |
| Method Summary        | 22 |
| Certification Summary | 23 |
| Chain of Custody      | 25 |
| Receipt Checklists    | 28 |

2

4

Q

9

11

### **Sample Summary**

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

| Lab Sample ID | Client Sample ID     | Matrix     | Collected      | Received       |
|---------------|----------------------|------------|----------------|----------------|
| 490-26469-1   | Outfall 01 A         | Wastewater | 05/09/13 18:10 | 05/11/13 08:30 |
| 490-26469-2   | Outfall 01 A         | Wastewater | 05/09/13 18:10 | 05/11/13 08:30 |
| 490-26469-3   | Outfall 01 A-TSS - 2 | Wastewater | 05/09/13 18:10 | 05/11/13 08:30 |
| 490-26469-4   | Outfall 01 A-TSS - 3 | Wastewater | 05/09/13 18:10 | 05/11/13 08:30 |
| 490-26469-5   | Trip Blank           | Water      | 05/09/13 00:01 | 05/11/13 08:30 |

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### **Case Narrative**

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

Job ID: 490-26469-1

**Laboratory: TestAmerica Nashville** 

Narrative

Job Narrative 490-26469-1

### Receipt

The samples were received on 5/11/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° C.

### **GC VOA**

Method(s) 602: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 79293.

No other analytical or quality issues were noted.

### GC Semi VOA

Method(s) 1671A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 79982 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

### Metals

Method(s) 245.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 79329 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. Post spike was added.

No other analytical or quality issues were noted.

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### **Definitions/Glossary**

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

### **Qualifiers**

### **GC VOA**

| Qualifier | Qualifier Description                |
|-----------|--------------------------------------|
| F         | MS or MSD exceeds the control limits |

### HPLC/IC

| Qualifier | Qualifier Description  |
|-----------|--|
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| р         | The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.      |

### **Metals**

| Qualifier | Qualifier Description                            |
|-----------|--|
| F         | MS or MSD exceeds the control limits             |
| F         | RPD of the MS and MSD exceeds the control limits |

### **General Chemistry**

| Qualifier | Qualifier Description  |
|-----------|--|
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### **Glossary**

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|---|
| n              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery  |
| CNF            | Contains no Free Liquid   |
| DER            | Duplicate error ratio (normalized absolute difference)  |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision level concentration  |
| MDA            | Minimum detectable activity   |
| EDL            | Estimated Detection Limit   |
| MDC            | Minimum detectable concentration  |
| MDL            | Method Detection Limit  |
| ML             | Minimum Level (Dioxin)  |

| MDL | Method Detection Limit |
|-----|------------------------|
| ML  | Minimum Level (Dioxin) |

| ND Not detected at the reporting limit (or MI | OL or EDL if shown) |
|---|---------------------|
|---|---------------------|

| PQL  | Practical Quantitation L  | imit     |
|------|---------------------------|----------|
| I QL | i ractical Quartitation L | _!!!!!!! |

| QC  | Quality Control     |
|-----|---------------------|
| RER | Relative error rati |

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TestAmerica Nashville

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Date Collected: 05/09/13 18:10

Date Received: 05/11/13 08:30

Client Sample ID: Outfall 01 A

TestAmerica Job ID: 490-26469-1

Lab Sample ID: 490-26469-1

**Matrix: Wastewater** 

| Analyte                                  | Result              | Qualifier   | RL       | MDL    | Unit         | D | Prepared                | Analyzed       | Dil Fa |
|--|---------------------|-------------|----------|--------|--------------|---|-------------------------|----------------|--------|
| Ethanol                                  | <500                |             | 2000     | 500    | ug/L         |   |                         | 05/17/13 12:14 |        |
| Survey made                              | 9/ <b>D</b> anayamı | Ovelifier   | Limits   |        |              |   | Dranavad                | Amalumad       | Dil Fa |
| Surrogate                                | %Recovery           | Qualifier   |          |        |              |   | Prepared                | Analyzed       |        |
| Isopropyl acetate (Surr)                 | 94                  |             | 52 - 128 |        |              |   |                         | 05/17/13 12:14 |        |
| <b>Method: 602 - Purgeable Aromatics</b> | • •                 |             |          |        |              |   |                         |                |        |
| Analyte                                  |                     | Qualifier   | RL       |        | Unit         | D | Prepared                | Analyzed       | Dil Fa |
| Benzene                                  | 21.7                |             | 1.00     | 0.360  | J            |   |                         | 05/15/13 12:18 |        |
| Toluene                                  | 80.2                |             | 1.00     | 0.330  | ug/L         |   |                         | 05/15/13 12:18 |        |
| Ethylbenzene                             | 12.2                |             | 1.00     | 0.370  | ug/L         |   |                         | 05/15/13 12:18 |        |
| Xylenes, Total                           | 85.7                |             | 3.00     | 0.600  | ug/L         |   |                         | 05/15/13 12:18 |        |
| Methyl tert-butyl ether                  | 45.9                |             | 1.00     | 0.460  | ug/L         |   |                         | 05/15/13 12:18 |        |
| Surrogate                                | %Recovery           | Qualifier   | Limits   |        |              |   | Prepared                | Analyzed       | Dil Fa |
| a,a,a-Trifluorotoluene                   | 119                 |             | 50 - 150 |        |              |   |                         | 05/15/13 12:18 |        |
| Method: 610 - PAHs (HPLC)                |                     |             |          |        |              |   |                         |                |        |
| Analyte                                  | Result              | Qualifier   | RL       | MDL    | Unit         | D | Prepared                | Analyzed       | Dil Fa |
| Acenaphthene                             | 0.564               | J p         | 0.935    | 0.159  | ug/L         |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Acenaphthylene                           | <0.215              |             | 0.935    | 0.215  | ug/L         |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Anthracene                               | < 0.0935            |             | 0.935    | 0.0935 | ug/L         |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Benzo[a]anthracene                       | <0.0187             |             | 0.187    | 0.0187 | ug/L         |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Benzo[a]pyrene                           | 0.0509              | J           | 0.0935   | 0.0187 | ug/L         |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Benzo[b]fluoranthene                     | 0.0800              | J           | 0.0935   | 0.0187 | ug/L         |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Benzo[g,h,i]perylene                     | 0.147               | J           | 0.187    | 0.0187 | ug/L         |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Benzo[k]fluoranthene                     | <0.0187             |             | 0.131    | 0.0187 | ug/L         |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Chrysene                                 | 0.0610              | Jp          | 0.0935   | 0.0187 | -            |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Dibenz(a,h)anthracene                    | <0.0280             |             | 0.187    | 0.0280 |              |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Fluoranthene                             | 0.441               |             | 0.187    | 0.0280 | -            |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Fluorene                                 | 0.175               | 1           | 0.467    | 0.0374 | _            |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Indeno[1,2,3-cd]pyrene                   | 0.105               |             | 0.187    | 0.0374 |              |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Naphthalene                              | <0.318              | 3 p         | 0.935    | 0.318  | -            |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| •  |                     | 1           | 0.467    | 0.0467 | -            |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Phenanthrene<br>Pyrene                   | 0.215<br>0.469      |             | 0.187    | 0.0280 | <del>.</del> |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Surrogato                                | % Pacayons          | Qualifier   | Limits   |        |              |   | Prenared                | Analyzod       | Dil Fa |
| Surrogate                                | %Recovery           | - quaiiilei |          |        |              |   | Prepared 05/14/12 07:14 | Analyzed       | DII FA |
| p-Terphenyl                              | 91                  |             | 25 - 135 |        |              |   | 05/14/13 07:14          | 05/21/13 06:05 |        |
| Method: 245.1 - Mercury (CVAA)           |                     |             |          |        |              |   |                         |                |        |
| Analyte                                  | Result              | Qualifier   | RL       |        | Unit         | D | Prepared                | Analyzed       | Dil Fa |
| Mercury                                  | <0.150              |             | 0.200    | 0.150  | ug/L         |   | 05/15/13 09:33          | 05/15/13 17:08 |        |
| General Chemistry                        |                     |             |          |        |              |   |                         |                |        |
| Analyte                                  | Result              | Qualifier   | RL       | MDL    | Unit         | D | Prepared                | Analyzed       | Dil Fa |
| Oil & Grease (HEM)                       | 1.51                | J           | 3.62     | 1.27   | mg/L         |   | 05/15/13 09:57          | 05/15/13 09:57 |        |
| · · · · · · · · · · · · · · · · · · ·    |                     |             |          |        | -            |   |                         |                |        |

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

Lab Sample ID: 490-26469-2

**Matrix: Wastewater** 

Client Sample ID: Outfall 01 A Date Collected: 05/09/13 18:10

Date Received: 05/11/13 08:30

| General Chemistry      |        |           |      |      |      |   |          |                |         |
|------------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Analyte                | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
| Total Suspended Solids | 40.0   |           | 2.00 | 1.20 | mg/L |   |          | 05/11/13 13:22 | 1       |

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Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

Client Sample ID: Outfall 01 A-TSS - 2

Lab Sample ID: 490-26469-3

Date Collected: 05/09/13 18:10 Matrix: Wastewater

Date Received: 05/11/13 08:30

| General Chemistry      |        |           |      |      |      |   |          |                |         |
|------------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Analyte                | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
| Total Suspended Solids | 33.8   |           | 2.00 | 1.20 | mg/L |   |          | 05/15/13 15:05 | 1       |

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Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

Client Sample ID: Outfall 01 A-TSS - 3

Lab Sample ID: 490-26469-4 Date Collected: 05/09/13 18:10

**Matrix: Wastewater** 

Date Received: 05/11/13 08:30

| General Chemistry      |                  |      |           |   |          |                |         |
|------------------------|------------------|------|-----------|---|----------|----------------|---------|
| Analyte                | Result Qualifier | RL   | MDL Unit  | D | Prepared | Analyzed       | Dil Fac |
| Total Suspended Solids | 33.6             | 2.00 | 1.20 mg/L |   |          | 05/15/13 15:05 | 1       |

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

**Client Sample ID: Trip Blank** 

Date Collected: 05/09/13 00:01 Date Received: 05/11/13 08:30 Lab Sample ID: 490-26469-5

. Matrix: Water

| Method: 602 - Purgeable A | romatics (GC) |           |          |       |      |   |          |                |         |
|---------------------------|---------------|-----------|----------|-------|------|---|----------|----------------|---------|
| Analyte                   | Result        | Qualifier | RL       | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
| Benzene                   | <0.360        |           | 1.00     | 0.360 | ug/L |   |          | 05/15/13 11:48 | 1       |
| Toluene                   | <0.330        |           | 1.00     | 0.330 | ug/L |   |          | 05/15/13 11:48 | 1       |
| Ethylbenzene              | <0.370        |           | 1.00     | 0.370 | ug/L |   |          | 05/15/13 11:48 | 1       |
| Xylenes, Total            | <0.600        |           | 3.00     | 0.600 | ug/L |   |          | 05/15/13 11:48 | 1       |
| Methyl tert-butyl ether   | <0.460        |           | 1.00     | 0.460 | ug/L |   |          | 05/15/13 11:48 | 1       |
| Surrogate                 | %Recovery     | Qualifier | Limits   |       |      |   | Prepared | Analyzed       | Dil Fac |
| a,a,a-Trifluorotoluene    | 103           |           | 50 - 150 |       |      | = |          | 05/15/13 11:48 | 1       |

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1:

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

| Method: | 1671A - | - Ethanol | (GC/FID) |
|---------|---------|-----------|----------|
|---------|---------|-----------|----------|

Lab Sample ID: MB 490-79982/4 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 79982** 

| Analyte | Result | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|---------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Ethanol | <500   |           | 2000 | 500 | ug/L |   |          | 05/17/13 11:13 | 1       |
|         |        |           |      |     |      |   |          |                |         |

MB MB

MR MR

| Surrogate                | %Recovery Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|--------------------------|---------------------|----------|----------|----------------|---------|
| Isopropyl acetate (Surr) | 98                  | 52 - 128 |          | 05/17/13 11:13 | 1       |

Lab Sample ID: LCS 490-79982/5

**Matrix: Water** 

Analysis Batch: 79982

|         | Spike     | LCS    | LCS       |      |   |      | %Rec.    |  |
|---------|-----------|--------|-----------|------|---|------|----------|--|
| Analyte | Added     | Result | Qualifier | Unit | D | %Rec | Limits   |  |
| Ethanol | <br>50000 | 49360  |           | ug/L | _ | 99   | 70 - 130 |  |

LCS LCS

Surrogate %Recovery Qualifier Limits 100 52 - 128 Isopropyl acetate (Surr)

Lab Sample ID: LCSD 490-79982/6

**Matrix: Water** 

Analysis Batch: 79982

|         | Spike | LCSD LCSD       |        |   |      | %Rec.    |     | RPD   |
|---------|-------|-----------------|--------|---|------|----------|-----|-------|
| Analyte | Added | Result Qualifie | r Unit | D | %Rec | Limits   | RPD | Limit |
| Ethanol | 50000 | 52670           | ug/L   |   | 105  | 70 - 130 | 6   | 20    |

LCSD LCSD

%Recovery Qualifier Surrogate Limits Isopropyl acetate (Surr) 91 52 - 128

Lab Sample ID: 490-26469-1 MS Client Sample ID: Outfall 01 A **Matrix: Wastewater** Prep Type: Total/NA

Analysis Batch: 79982

|         | Sample | Sample    | Spike | MS     | MS        |      |   |      | %Rec.    |  |
|---------|--------|-----------|-------|--------|-----------|------|---|------|----------|--|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   |  |
| Ethanol | <500   |           | 50000 | <500   | F         | ug/L |   | 0    | 70 - 130 |  |

MS MS

Surrogate Limits %Recovery Qualifier Isopropyl acetate (Surr) 52 - 128 92

Lab Sample ID: 490-26469-1 MSD Client Sample ID: Outfall 01 A

**Matrix: Wastewater** Applyeic Patch: 70093

| Allalysis Datcil. 19902 |        |           |       |        |           |      |   |      |          |     |       |
|-------------------------|--------|-----------|-------|--------|-----------|------|---|------|----------|-----|-------|
|                         | Sample | Sample    | Spike | MSD    | MSD       |      |   |      | %Rec.    |     | RPD   |
| Analyte                 | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |
| Ethanol                 | <500   |           | 50000 | <500   | F         | ug/L |   | 0    | 70 - 130 | NC  | 20    |
|                         |        |           |       |        |           |      |   |      |          |     |       |

MSD MSD Surrogate %Recovery Qualifier Limits 52 - 128 Isopropyl acetate (Surr) 94

TestAmerica Nashville

Prep Type: Total/NA

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Method: 602 - Purgeable Aromatics (GC)

Lab Sample ID: MB 490-79293/7

**Matrix: Water** 

**Analysis Batch: 79293** 

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB RL Analyte Result Qualifier MDL Unit D Prepared Analyzed Dil Fac Benzene <0.360 1.00 0.360 ug/L 05/15/13 09:21 Toluene < 0.330 1.00 0.330 ug/L 05/15/13 09:21 < 0.370 Ethylbenzene 1.00 0.370 ug/L 05/15/13 09:21 <0.600 3.00 Xylenes, Total 0.600 ug/L 05/15/13 09:21 Methyl tert-butyl ether <0.460 1.00 0.460 ug/L 05/15/13 09:21

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 50 - 150 05/15/13 09:21 a,a,a-Trifluorotoluene 112

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

**Analysis Batch: 79293** 

**Matrix: Water** 

Lab Sample ID: LCS 490-79293/18

LCS LCS Spike %Rec. Analyte Added Result Qualifier %Rec Unit Limits Benzene 20.0 20.02 ug/L 100 39 - 150 Toluene 20.0 22.20 ug/L 111 46 - 148 20.0 22.65 Ethylbenzene ug/L 113 32 - 160 Xylenes, Total 60.0 69.14 ug/L 115 66 - 136 Methyl tert-butyl ether 20.0 18.57 ug/L 93 56 - 136

LCS LCS

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene 112 50 - 150

Method: 610 - PAHs (HPLC)

Lab Sample ID: MB 490-78949/1-A

**Matrix: Water** 

Analysis Batch: 80418

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 78949

| Analysis batch: 60416  |         |           |       |        |      |   |                | Prep Batti     | 1. 70949 |
|------------------------|---------|-----------|-------|--------|------|---|----------------|----------------|----------|
|                        | MB      | MB        |       |        |      |   |                |                |          |
| Analyte                | Result  | Qualifier | RL    | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac  |
| Acenaphthene           | <0.170  |           | 1.00  | 0.170  | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Acenaphthylene         | <0.230  |           | 1.00  | 0.230  | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Anthracene             | <0.100  |           | 1.00  | 0.100  | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Benzo[a]anthracene     | <0.0200 |           | 0.200 | 0.0200 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Benzo[a]pyrene         | <0.0200 |           | 0.100 | 0.0200 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Benzo[b]fluoranthene   | <0.0200 |           | 0.100 | 0.0200 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Benzo[g,h,i]perylene   | <0.0200 |           | 0.200 | 0.0200 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Benzo[k]fluoranthene   | <0.0200 |           | 0.140 | 0.0200 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Chrysene               | <0.0200 |           | 0.100 | 0.0200 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Dibenz(a,h)anthracene  | <0.0300 |           | 0.200 | 0.0300 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Fluoranthene           | <0.0300 |           | 0.200 | 0.0300 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Fluorene               | <0.0400 |           | 0.500 | 0.0400 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Indeno[1,2,3-cd]pyrene | <0.0400 |           | 0.200 | 0.0400 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Naphthalene            | <0.340  |           | 1.00  | 0.340  | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Phenanthrene           | <0.0500 |           | 0.500 | 0.0500 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
| Pyrene                 | <0.0300 |           | 0.200 | 0.0300 | ug/L |   | 05/14/13 07:14 | 05/21/13 01:09 | 1        |
|                        |         |           |       |        |      |   |                |                |          |

TestAmerica Nashville

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Method: 610 - PAHs (HPLC) (Continued)

Lab Sample ID: MB 490-78949/1-A

Lab Sample ID: LCS 490-78949/2-A

**Matrix: Water** 

**Matrix: Water** 

**Analysis Batch: 80418** 

**Analysis Batch: 80418** 

Client Sample ID: Method Blank **Prep Type: Total/NA** 

Prep Batch: 78949

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac p-Terphenyl 25 - 135 05/14/13 07:14 05/21/13 01:09 90

**Client Sample ID: Lab Control Sample** 

Prep Batch: 78949

Prep Type: Total/NA

| 7                      |       |        |           |      |   |      |          |  |
|------------------------|-------|--------|-----------|------|---|------|----------|--|
|                        | Spike | LCS    | LCS       |      |   |      | %Rec.    |  |
| Analyte                | Added | Result | Qualifier | Unit | D | %Rec | Limits   |  |
| Acenaphthene           | 2.50  | 2.590  |           | ug/L |   | 104  | 1 - 124  |  |
| Acenaphthylene         | 5.00  | 4.232  |           | ug/L |   | 85   | 1 _ 139  |  |
| Anthracene             | 2.50  | 2.444  |           | ug/L |   | 98   | 1 - 126  |  |
| Benzo[a]anthracene     | 2.50  | 2.461  |           | ug/L |   | 98   | 12 _ 135 |  |
| Benzo[a]pyrene         | 2.50  | 2.382  |           | ug/L |   | 95   | 1 _ 128  |  |
| Benzo[b]fluoranthene   | 2.50  | 2.421  |           | ug/L |   | 97   | 6 - 150  |  |
| Benzo[g,h,i]perylene   | 2.50  | 2.348  |           | ug/L |   | 94   | 1 _ 116  |  |
| Benzo[k]fluoranthene   | 2.50  | 2.602  |           | ug/L |   | 104  | 1 - 159  |  |
| Chrysene               | 2.50  | 2.559  |           | ug/L |   | 102  | 1 _ 199  |  |
| Dibenz(a,h)anthracene  | 2.50  | 2.081  |           | ug/L |   | 83   | 1 _ 110  |  |
| Fluoranthene           | 2.50  | 2.356  |           | ug/L |   | 94   | 14 - 123 |  |
| Fluorene               | 2.50  | 2.252  |           | ug/L |   | 90   | 1 _ 142  |  |
| Indeno[1,2,3-cd]pyrene | 2.50  | 2.396  |           | ug/L |   | 96   | 1 - 116  |  |
| Naphthalene            | 2.50  | 2.111  |           | ug/L |   | 84   | 1 _ 122  |  |
| Phenanthrene           | 2.50  | 2.363  |           | ug/L |   | 95   | 1 _ 155  |  |
| Pyrene                 | 2.50  | 2.466  |           | ug/L |   | 99   | 1 - 140  |  |

LCS LCS

%Recovery Qualifier Limits Surrogate 25 - 135 p-Terphenyl 95

Lab Sample ID: LCSD 490-78949/3-A

**Matrix: Water** 

**Analysis Batch: 80418** 

| Client S | Sample | ID: | Lab | Conti | rol S | Samp | le C | )up |
|----------|--------|-----|-----|-------|-------|------|------|-----|
|          |        |     |     | _     | _     | _    | 4.00 |     |

Prep Type: Total/NA Prep Batch: 78949

|                        | Spike | LCSD   | LCSD      |      |   |      | %Rec.    |     | RPD   |
|------------------------|-------|--------|-----------|------|---|------|----------|-----|-------|
| Analyte                | Added | Result | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |
| Acenaphthene           | 2.50  | 2.116  |           | ug/L |   | 85   | 1 - 124  | 20  | 50    |
| Acenaphthylene         | 5.00  | 3.949  |           | ug/L |   | 79   | 1 - 139  | 7   | 50    |
| Anthracene             | 2.50  | 2.241  |           | ug/L |   | 90   | 1 - 126  | 9   | 50    |
| Benzo[a]anthracene     | 2.50  | 2.265  |           | ug/L |   | 91   | 12 - 135 | 8   | 50    |
| Benzo[a]pyrene         | 2.50  | 2.209  |           | ug/L |   | 88   | 1 - 128  | 8   | 50    |
| Benzo[b]fluoranthene   | 2.50  | 2.252  |           | ug/L |   | 90   | 6 - 150  | 7   | 50    |
| Benzo[g,h,i]perylene   | 2.50  | 2.117  |           | ug/L |   | 85   | 1 - 116  | 10  | 50    |
| Benzo[k]fluoranthene   | 2.50  | 2.203  |           | ug/L |   | 88   | 1 - 159  | 17  | 50    |
| Chrysene               | 2.50  | 2.352  |           | ug/L |   | 94   | 1 - 199  | 8   | 50    |
| Dibenz(a,h)anthracene  | 2.50  | 1.980  |           | ug/L |   | 79   | 1 - 110  | 5   | 50    |
| Fluoranthene           | 2.50  | 2.186  |           | ug/L |   | 87   | 14 - 123 | 7   | 50    |
| Fluorene               | 2.50  | 2.044  |           | ug/L |   | 82   | 1 - 142  | 10  | 50    |
| Indeno[1,2,3-cd]pyrene | 2.50  | 2.217  |           | ug/L |   | 89   | 1 - 116  | 8   | 50    |
| Naphthalene            | 2.50  | 2.036  |           | ug/L |   | 81   | 1 - 122  | 4   | 50    |
| Phenanthrene           | 2.50  | 2.188  |           | ug/L |   | 88   | 1 - 155  | 8   | 50    |
| Pyrene                 | 2.50  | 2.339  |           | ug/L |   | 94   | 1 - 140  | 5   | 50    |

TestAmerica Nashville

Page 13 of 29

5/28/2013

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Method: 610 - PAHs (HPLC) (Continued)

Lab Sample ID: LCSD 490-78949/3-A

**Matrix: Water** 

**Analysis Batch: 80418** 

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 78949

LCSD LCSD

%Recovery Qualifier Surrogate Limits p-Terphenyl 91 25 - 135

> Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 78949

Lab Sample ID: 490-26255-F-11-A MS **Matrix: Water Analysis Batch: 80418** 

Spike MS MS Sample Sample %Rec. Result Qualifier Limits Analyte Added Result Qualifier Unit %Rec <0.159 2.34 1.968 ug/L 84 1 - 124 Acenaphthene < 0.215 4.67 3.493 75 1 \_ 139 Acenaphthylene ug/L Anthracene <0.0935 2.34 2.072 ug/L 89 1 \_ 126 Benzo[a]anthracene < 0.0187 2.34 2.130 ug/L 91 12 - 135 Benzo[a]pyrene <0.0187 2.34 2.114 ug/L 90 1 \_ 128 ug/L Benzo[b]fluoranthene < 0.0187 2 34 2 117 91 6 - 150 Benzo[g,h,i]perylene < 0.0187 2.34 1.998 ug/L 86 1 - 116 Benzo[k]fluoranthene 2.34 2.062 88 < 0.0187 ug/L 1 - 159 Chrysene <0.0187 2.34 2.191 ug/L 94 1 - 199 Dibenz(a,h)anthracene <0.0280 2.34 1.972 ug/L 84 1 - 110 Fluoranthene < 0.0280 2.34 2.030 ug/L 87 14 - 123 Fluorene <0.0374 2.34 1.873 ug/L 80 1 - 142 Indeno[1,2,3-cd]pyrene < 0.0374 2 34 1.980 ug/L 85 1 - 116 Naphthalene 2.34 75 < 0.318 1.754 ug/L 1 - 122 ug/L Phenanthrene < 0.0467 2 34 2 007 86 1 - 155 Pyrene <0.0280 2.34 2.172 ug/L 93 1 - 140

MS MS

MB MB

Surrogate %Recovery Qualifier Limits p-Terphenyl 25 - 135 89

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 490-79329/1-A Client Sample ID: Method Blank

**Matrix: Water** 

Analyte

Mercury

Analysis Batch: 79566

Prep Type: Total/NA Prep Batch: 79329

ug/L

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac

0.200 05/15/13 09:33 Mercury <0.150 0.150 ug/L 05/15/13 16:34

Lab Sample ID: LCS 490-79329/2-A

**Analysis Batch: 79566** 

Spike

**Matrix: Water** Prep Type: Total/NA Prep Batch: 79329 LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits

0.9244

1.00

TestAmerica Nashville

**Client Sample ID: Lab Control Sample** 

85 - 115

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 490-79329/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA Analysis Batch: 79566 Prep Batch: 79329

Spike LCSD LCSD Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec 1.00 91 85 - 115 Mercury 0.9108 ug/L

Lab Sample ID: 490-26333-A-6-B MS Client Sample ID: Matrix Spike **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 79566** Prep Batch: 79329

Sample Sample Spike MS MS Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Mercury <0.150 1.00 0.3687 F ug/L 37 70 - 130

Client Sample ID: Matrix Spike Duplicate Lab Sample ID: 490-26333-A-6-C MSD Prep Type: Total/NA

**Matrix: Water** Analysis Batch: 79566

Prep Batch: 79329 MSD MSD Spike %Rec. RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit <0.150 1.00 0.2928 Mercury ug/L 20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 490-79341/1-A Client Sample ID: Method Blank

**Matrix: Water** Prep Type: Total/NA **Analysis Batch: 79371** Prep Batch: 79341 MB MB

Analyte Result Qualifier RL MDL Unit Prepared Dil Fac Analyzed <1.40 4.00 05/15/13 09:57 05/15/13 09:57 Oil & Grease (HEM) 1.40 ma/L

Lab Sample ID: LCS 490-79341/2-A Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 79371** Prep Batch: 79341

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits

41.7 Oil & Grease (HEM) 38.44 mg/L 92 78 - 114

Lab Sample ID: LCSD 490-79341/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA Analysis Batch: 79371 Prep Batch: 79341 LCSD LCSD Spike %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit

Oil & Grease (HEM) 41.7 36.87 mg/L 88 78 - 114 18 Lab Sample ID: 490-26337-P-1-A MS Client Sample ID: Matrix Spike

**Matrix: Water** Prep Type: Total/NA **Analysis Batch: 79371** Prep Batch: 79341 Sample Sample Spike MS MS %Rec.

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Oil & Grease (HEM) <1.58 46.5 43.49 mg/L 93 78 - 114

TestAmerica Nashville

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Method: OIA-1677 - Cyanide, Available (Flow Injection)

Lab Sample ID: MB 180-72364/35

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 72364

**Matrix: Water** 

MB MB

| Analyte           | Result Qualifier | RL      | MDL     | Unit | ı | D | Prepared | Analyzed       | Dil Fac |
|-------------------|------------------|---------|---------|------|---|---|----------|----------------|---------|
| Available cyanide | <0.00180         | 0.00200 | 0.00180 | mg/L |   |   |          | 05/20/13 11:20 | 1       |

Lab Sample ID: LCS 180-72364/33 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 72364** 

LCS LCS Spike %Rec. Added Analyte Result Qualifier Unit %Rec Limits Available cyanide 0.100 0.1000 mg/L 100 82 - 132

Lab Sample ID: LCSD 180-72364/34 Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 72364

Spike LCSD LCSD %Rec. RPD Added Result Qualifier Unit %Rec Limits **RPD** Limit Available cyanide 0.100 0.1030 103 mg/L

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 490-78604/1 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 78604** 

MB MB

| Analyte                |        | Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|-------|------|---|----------|----------------|---------|
| Total Suspended Solids | <0.600 |           | 1.00 | 0.600 | mg/L |   |          | 05/11/13 13:22 | 1       |

Lab Sample ID: LCS 490-78604/2 **Client Sample ID: Lab Control Sample** 

**Matrix: Water** 

Analysis Batch: 78604

|                        | Spike | LCS    | LCS       |      |   |      | %Rec.  |  |
|------------------------|-------|--------|-----------|------|---|------|--------|--|
| Analyte                | Added | Result | Qualifier | Unit | D | %Rec | Limits |  |
| Total Suspended Solids |       | 99.60  |           | ma/l | _ | 99   | 90 110 |  |

Lab Sample ID: 490-26315-L-1 DU Client Sample ID: Duplicate

**Matrix: Water** 

**Analysis Batch: 78604** 

| -                      | Sample | Sample    | DU     | DU        |      |   |  |     | RPD   |
|------------------------|--------|-----------|--------|-----------|------|---|--|-----|-------|
| Analyte                | Result | Qualifier | Result | Qualifier | Unit | D |  | RPD | Limit |
| Total Suspended Solids | 1.40   |           | 0.6000 | J         | mg/L |   |  | 80  | 20    |

Lab Sample ID: 490-26321-J-1 DU **Client Sample ID: Duplicate** 

**Matrix: Water** 

| Analysis Batch: 78604  |        |           |        |           |      |   |  |     |       |
|------------------------|--------|-----------|--------|-----------|------|---|--|-----|-------|
|                        | Sample | Sample    | DU     | DU        |      |   |  |     | RPD   |
| Analyte                | Result | Qualifier | Result | Qualifier | Unit | D |  | RPD | Limit |
| Total Suspended Solids | <0.600 |           | <0.600 |           | mg/L |   |  | NC  | 20    |

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

### **QC Sample Results**

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

### Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: MB 490-79464/1

Matrix: Water

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 79464

|                        | MB     | МВ        |      |       |      |   |          |                |         |
|------------------------|--------|-----------|------|-------|------|---|----------|----------------|---------|
| Analyte                | Result | Qualifier | RL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
| Total Suspended Solids | <0.600 |           | 1.00 | 0.600 | mg/L |   |          | 05/15/13 15:05 | 1       |

Lab Sample ID: LCS 490-79464/2

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 79464

 Spike
 LCS
 LCS
 %Rec.

 Analyte
 Added
 Result
 Qualifier
 Unit
 D
 %Rec
 Limits

 Total Suspended Solids
 101
 100.0
 mg/L
 99
 90 - 110

Lab Sample ID: 490-26651-E-1 DU

Matrix: Water

Client Sample ID: Duplicate
Prep Type: Total/NA

Analysis Batch: 79464

 Sample
 DU
 DU
 DU
 RPD

 Analyte
 Result
 Qualifier
 Result
 Qualifier
 Unit
 D
 RPD
 Limit

 Total Suspended Solids
 40.5
 40.50
 mg/L
 0
 20

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

GC VOA

Analysis Batch: 79293

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix     | Method Prep Batch |
|------------------|--------------------|-----------|------------|-------------------|
| 490-26469-1      | Outfall 01 A       | Total/NA  | Wastewater | 602               |
| 490-26469-5      | Trip Blank         | Total/NA  | Water      | 602               |
| LCS 490-79293/18 | Lab Control Sample | Total/NA  | Water      | 602               |
| MB 490-79293/7   | Method Blank       | Total/NA  | Water      | 602               |

Analysis Batch: 79982

| Lab Sample ID    | Client Sample ID       | Prep Type | Matrix     | Method | Prep Batch |
|------------------|------------------------|-----------|------------|--------|------------|
| 490-26469-1      | Outfall 01 A           | Total/NA  | Wastewater | 1671A  |            |
| 490-26469-1 MS   | Outfall 01 A           | Total/NA  | Wastewater | 1671A  |            |
| 490-26469-1 MSD  | Outfall 01 A           | Total/NA  | Wastewater | 1671A  |            |
| LCS 490-79982/5  | Lab Control Sample     | Total/NA  | Water      | 1671A  |            |
| LCSD 490-79982/6 | Lab Control Sample Dup | Total/NA  | Water      | 1671A  |            |
| MB 490-79982/4   | Method Blank           | Total/NA  | Water      | 1671A  |            |

HPLC/IC

Prep Batch: 78949

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix     | Method | Prep Bato |
|---------------------|------------------------|-----------|------------|--------|-----------|
| 490-26255-F-11-A MS | Matrix Spike           | Total/NA  | Water      | 610    |           |
| 490-26469-1         | Outfall 01 A           | Total/NA  | Wastewater | 610    |           |
| LCS 490-78949/2-A   | Lab Control Sample     | Total/NA  | Water      | 610    |           |
| LCSD 490-78949/3-A  | Lab Control Sample Dup | Total/NA  | Water      | 610    |           |
| MB 490-78949/1-A    | Method Blank           | Total/NA  | Water      | 610    |           |

**Analysis Batch: 80418** 

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix     | Method | Prep Batch |  |
|---------------------|------------------------|-----------|------------|--------|------------|--|
| 490-26255-F-11-A MS | Matrix Spike           | Total/NA  | Water      | 610    | 78949      |  |
| 490-26469-1         | Outfall 01 A           | Total/NA  | Wastewater | 610    | 78949      |  |
| LCS 490-78949/2-A   | Lab Control Sample     | Total/NA  | Water      | 610    | 78949      |  |
| LCSD 490-78949/3-A  | Lab Control Sample Dup | Total/NA  | Water      | 610    | 78949      |  |
| MB 490-78949/1-A    | Method Blank           | Total/NA  | Water      | 610    | 78949      |  |

Metals

Prep Batch: 79329

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix     | Method | Prep Batch |
|---------------------|------------------------|-----------|------------|--------|------------|
| 490-26333-A-6-B MS  | Matrix Spike           | Total/NA  | Water      | 245.1  |            |
| 490-26333-A-6-C MSD | Matrix Spike Duplicate | Total/NA  | Water      | 245.1  |            |
| 490-26469-1         | Outfall 01 A           | Total/NA  | Wastewater | 245.1  |            |
| LCS 490-79329/2-A   | Lab Control Sample     | Total/NA  | Water      | 245.1  |            |
| LCSD 490-79329/3-A  | Lab Control Sample Dup | Total/NA  | Water      | 245.1  |            |
| MB 490-79329/1-A    | Method Blank           | Total/NA  | Water      | 245.1  |            |

Analysis Batch: 79566

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix     | Method | Prep Batch |
|---------------------|------------------------|-----------|------------|--------|------------|
| 490-26333-A-6-B MS  | Matrix Spike           | Total/NA  | Water      | 245.1  | 79329      |
| 490-26333-A-6-C MSD | Matrix Spike Duplicate | Total/NA  | Water      | 245.1  | 79329      |
| 490-26469-1         | Outfall 01 A           | Total/NA  | Wastewater | 245.1  | 79329      |
| LCS 490-79329/2-A   | Lab Control Sample     | Total/NA  | Water      | 245.1  | 79329      |
| LCSD 490-79329/3-A  | Lab Control Sample Dup | Total/NA  | Water      | 245.1  | 79329      |

TestAmerica Nashville

5/28/2013

Page 18 of 29

3

6

8

46

11

15

### **QC Association Summary**

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

### **Metals (Continued)**

### Analysis Batch: 79566 (Continued)

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 490-79329/1-A | Method Blank     | Total/NA  | Water  | 245.1  | 79329      |

### **General Chemistry**

### Analysis Batch: 72364

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix     | Method   | Prep Batch |
|-------------------|------------------------|-----------|------------|----------|------------|
| 490-26469-1       | Outfall 01 A           | Total/NA  | Wastewater | OIA-1677 |            |
| LCS 180-72364/33  | Lab Control Sample     | Total/NA  | Water      | OIA-1677 |            |
| LCSD 180-72364/34 | Lab Control Sample Dup | Total/NA  | Water      | OIA-1677 |            |
| MB 180-72364/35   | Method Blank           | Total/NA  | Water      | OIA-1677 |            |

### Analysis Batch: 78604

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix     | Method   | Prep Batch |
|------------------|--------------------|-----------|------------|----------|------------|
| 490-26315-L-1 DU | Duplicate          | Total/NA  | Water      | SM 2540D | _          |
| 490-26321-J-1 DU | Duplicate          | Total/NA  | Water      | SM 2540D |            |
| 490-26469-2      | Outfall 01 A       | Total/NA  | Wastewater | SM 2540D |            |
| LCS 490-78604/2  | Lab Control Sample | Total/NA  | Water      | SM 2540D |            |
| MB 490-78604/1   | Method Blank       | Total/NA  | Water      | SM 2540D |            |

### Prep Batch: 79341

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix     | Method | Prep Batch |
|--------------------|------------------------|-----------|------------|--------|------------|
| 490-26337-P-1-A MS | Matrix Spike           | Total/NA  | Water      | 1664A  |            |
| 490-26469-1        | Outfall 01 A           | Total/NA  | Wastewater | 1664A  |            |
| LCS 490-79341/2-A  | Lab Control Sample     | Total/NA  | Water      | 1664A  |            |
| LCSD 490-79341/3-A | Lab Control Sample Dup | Total/NA  | Water      | 1664A  |            |
| MB 490-79341/1-A   | Method Blank           | Total/NA  | Water      | 1664A  |            |

### Analysis Batch: 79371

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix     | Method | Prep Batch |
|--------------------|------------------------|-----------|------------|--------|------------|
| 490-26337-P-1-A MS | Matrix Spike           | Total/NA  | Water      | 1664A  | 79341      |
| 490-26469-1        | Outfall 01 A           | Total/NA  | Wastewater | 1664A  | 79341      |
| LCS 490-79341/2-A  | Lab Control Sample     | Total/NA  | Water      | 1664A  | 79341      |
| LCSD 490-79341/3-A | Lab Control Sample Dup | Total/NA  | Water      | 1664A  | 79341      |
| MB 490-79341/1-A   | Method Blank           | Total/NA  | Water      | 1664A  | 79341      |

### Analysis Batch: 79464

| Lab Sample ID    | Client Sample ID     | Prep Type | Matrix     | Method   | Prep Batch |
|------------------|----------------------|-----------|------------|----------|------------|
| 490-26469-3      | Outfall 01 A-TSS - 2 | Total/NA  | Wastewater | SM 2540D |            |
| 490-26469-4      | Outfall 01 A-TSS - 3 | Total/NA  | Wastewater | SM 2540D |            |
| 490-26651-E-1 DU | Duplicate            | Total/NA  | Water      | SM 2540D |            |
| LCS 490-79464/2  | Lab Control Sample   | Total/NA  | Water      | SM 2540D |            |
| MB 490-79464/1   | Method Blank         | Total/NA  | Water      | SM 2540D |            |

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

Lab Sample ID: 490-26469-1

Matrix: Wastewater

Client Sample ID: Outfall 01 A

Date Collected: 05/09/13 18:10 Date Received: 05/11/13 08:30

|           | Batch    | Batch    |     | Dilution | Batch  | Prepared       |         |         |
|-----------|----------|----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method   | Run | Factor   | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | 602      |     |          | 79293  | 05/15/13 12:18 | AC      | TAL NSH |
| Total/NA  | Analysis | 1671A    |     | 1        | 79982  | 05/17/13 12:14 | JS      | TAL NSH |
| Total/NA  | Prep     | 610      |     |          | 78949  | 05/14/13 07:14 | AL      | TAL NSH |
| Total/NA  | Analysis | 610      |     | 1        | 80418  | 05/21/13 06:05 | HT      | TAL NSH |
| Total/NA  | Prep     | 610      |     |          | 78949  | 05/14/13 07:14 | AL      | TAL NSH |
| Total/NA  | Analysis | 610      |     | 1        | 80418  | 05/21/13 06:05 | HT      | TAL NSH |
| Total/NA  | Prep     | 610      |     |          | 78949  | 05/14/13 07:14 | AL      | TAL NSH |
| Total/NA  | Analysis | 610      |     | 1        | 80418  | 05/21/13 06:05 | HT      | TAL NSH |
| Total/NA  | Prep     | 245.1    |     |          | 79329  | 05/15/13 09:33 | LB      | TAL NSH |
| Total/NA  | Analysis | 245.1    |     | 1        | 79566  | 05/15/13 17:08 | NLI     | TAL NSH |
| Total/NA  | Analysis | OIA-1677 |     | 1        | 72364  | 05/20/13 11:29 | PJ      | TAL PIT |
| Total/NA  | Analysis | 1664A    |     | 1        | 79371  | 05/15/13 09:57 | BD      | TAL NSH |
| Total/NA  | Prep     | 1664A    |     |          | 79341  | 05/15/13 09:57 | BD      | TAL NSH |
| _         |          |          |     |          |        |                |         |         |

Client Sample ID: Outfall 01 A

Date Collected: 05/09/13 18:10

Date Received: 05/11/13 08:30

|           | Batch    | Batch    |     | Dilution | Batch  | Prepared       |         |         |
|-----------|----------|----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Type     | Method   | Run | Factor   | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | SM 2540D |     | 1        | 78604  | 05/11/13 13:22 | NH      | TAL NSH |

Client Sample ID: Outfall 01 A-TSS - 2

Date Collected: 05/09/13 18:10

Date Received: 05/11/13 08:30

|           | Batch    | Batch    |     | Dilution | Batch  | Prepared       |         |         |
|-----------|----------|----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Type     | Method   | Run | Factor   | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | SM 2540D |     |          | 79464  | 05/15/13 15:05 | NH      | TAL NSH |

Client Sample ID: Outfall 01 A-TSS - 3

Date Collected: 05/09/13 18:10

Date Received: 05/11/13 08:30

|           | Batch    | Batch    |     | Dilution | Batch  | Prepared       |         |         |
|-----------|----------|----------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Туре     | Method   | Run | Factor   | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | SM 2540D |     |          | 79464  | 05/15/13 15:05 | NH      | TAL NSH |

**Client Sample ID: Trip Blank** 

Date Collected: 05/09/13 00:01

Date Received: 05/11/13 08:30

|           | Batch    | Batch  |     | Dilution | Batch  | Prepared       |         |         |
|-----------|----------|--------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Type     | Method | Run | Factor   | Number | or Analyzed    | Analyst | Lab     |
| Total/NA  | Analysis | 602    |     |          | 79293  | 05/15/13 11:48 | AC      | TAL NSH |

TestAmerica Nashville

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Lab Sample ID: 490-26469-3 Matrix: Wastewater

**Matrix: Wastewater** 

Lab Sample ID: 490-26469-2

Lab Sample ID: 490-26469-4

Matrix: Wastewater

### **Lab Chronicle**

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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### **Method Summary**

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

TestAmerica Job ID: 490-26469-1

| Method   | Method Description                  | Protocol  | Laboratory |
|----------|-------------------------------------|-----------|------------|
| 1671A    | Ethanol (GC/FID)                    | EPA       | TAL NSH    |
| 602      | Purgeable Aromatics (GC)            | 40CFR136A | TAL NSH    |
| 610      | PAHs (HPLC)                         | 40CFR136A | TAL NSH    |
| 245.1    | Mercury (CVAA)                      | EPA       | TAL NSH    |
| 1664A    | HEM and SGT-HEM                     | 1664A     | TAL NSH    |
| OIA-1677 | Cyanide, Available (Flow Injection) | OI CORP   | TAL PIT    |
| SM 2540D | Solids, Total Suspended (TSS)       | SM        | TAL NSH    |

### **Protocol References:**

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

OI CORP = OI Corporation Instrument Manual.

SM = "Standard Methods For The Examination Of Water And Wastewater",

### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

### Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority           | Program       | EPA Region | Certification ID | Expiration Date |
|---------------------|---------------|------------|------------------|-----------------|
|                     | ACIL          |            | 393              | 10-30-13        |
| A2LA                | ISO/IEC 17025 |            | 0453.07          | 12-31-13        |
| Alabama             | State Program | 4          | 41150            | 05-31-13        |
| Alaska (UST)        | State Program | 10         | UST-087          | 07-24-13        |
| Arizona             | State Program | 9          | AZ0473           | 05-05-14 *      |
| Arkansas DEQ        | State Program | 6          | 88-0737          | 04-25-13 *      |
| California          | NELAP         | 9          | 1168CA           | 10-31-13        |
| Connecticut         | State Program | 1          | PH-0220          | 12-31-13        |
| Florida             | NELAP         | 4          | E87358           | 06-30-13        |
| Illinois            | NELAP         | 5          | 200010           | 12-09-13        |
| lowa                | State Program | 7          | 131              | 05-01-14        |
| Kansas              | NELAP         | 7          | E-10229          | 10-31-13        |
| Kentucky (UST)      | State Program | 4          | 19               | 09-15-13        |
| Louisiana           | NELAP         | 6          | 30613            | 06-30-13        |
| Maryland            | State Program | 3          | 316              | 03-31-14        |
| Massachusetts       | State Program | 1          | M-TN032          | 06-30-13        |
| Minnesota           | NELAP         | 5          | 047-999-345      | 12-31-13        |
| Mississippi         | State Program | 4          | N/A              | 06-30-13        |
| Montana (UST)       | State Program | 8          | NA               | 01-01-15        |
| Nevada              | State Program | 9          | TN00032          | 07-31-13        |
| New Hampshire       | NELAP         | 1          | 2963             | 10-10-13        |
| New Jersey          | NELAP         | 2          | TN965            | 06-30-13        |
| New York            | NELAP         | 2          | 11342            | 04-01-14        |
| North Carolina DENR | State Program | 4          | 387              | 12-31-13        |
| North Dakota        | State Program | 8          | R-146            | 06-30-13        |
| Ohio VAP            | State Program | 5          | CL0033           | 01-19-14        |
| Oregon              | NELAP         | 10         | TN200001         | 04-29-14        |
| Pennsylvania        | NELAP         | 3          | 68-00585         | 06-30-13        |
| Rhode Island        | State Program | 1          | LAO00268         | 12-30-13        |
| South Carolina      | State Program | 4          | 84009 (001)      | 05-31-14 *      |
| South Carolina      | State Program | 4          | 84009 (002)      | 02-23-14        |
| Tennessee           | State Program | 4          | 2008             | 02-23-14        |
| Texas               | NELAP         | 6          | T104704077-09-TX | 08-31-13        |
| USDA                | Federal       |            | S-48469          | 11-02-13        |
| Utah                | NELAP         | 8          | TAN              | 06-30-13        |
| Virginia            | NELAP         | 3          | 460152           | 06-14-13        |
| Washington          | State Program | 10         | C789             | 07-19-13        |
| West Virginia DEP   | State Program | 3          | 219              | 02-28-14        |
| Wisconsin           | State Program | 5          | 998020430        | 08-31-13        |
| Wyoming (UST)       | A2LA          | 8          | 453.07           | 12-31-13        |

### **Laboratory: TestAmerica Pittsburgh**

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority Arkansas DEQ | Program State Program | EPA Region 6 | Certification ID  88-0690 | Expiration Date 06-27-13 |
|------------------------|-----------------------|--------------|---------------------------|--------------------------|
| California             | NELAP                 | 9            | 4224CA                    | 03-31-14                 |
| Connecticut            | State Program         | 1            | PH-0688                   | 09-30-14                 |
| Florida                | NELAP                 | 4            | E871008                   | 06-30-13                 |
| Illinois               | NELAP                 | 5            | 002602                    | 06-30-13                 |

<sup>\*</sup> Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville

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5/28/2013

### **Certification Summary**

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal

### **Laboratory: TestAmerica Pittsburgh (Continued)**

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority           | Program       | EPA Region | Certification ID | Expiration Date |
|---------------------|---------------|------------|------------------|-----------------|
| Kansas              | NELAP         | 7          | E-10350          | 01-31-14        |
| L-A-B               | DoD ELAP      |            | L2314            | 07-24-13        |
| Louisiana           | NELAP         | 6          | 04041            | 06-30-13        |
| New Hampshire       | NELAP         | 1          | 203011           | 04-05-14        |
| New Jersey          | NELAP         | 2          | PA005            | 06-30-13        |
| New York            | NELAP         | 2          | 11182            | 04-01-14        |
| North Carolina DENR | State Program | 4          | 434              | 12-31-13        |
| Pennsylvania        | NELAP         | 3          | 02-00416         | 04-30-14        |
| South Carolina      | State Program | 4          | 89014            | 04-30-13 *      |
| US Fish & Wildlife  | Federal       |            | LE94312A-1       | 11-30-14        |
| USDA                | Federal       |            | P-Soil-01        | 04-16-15        |
| USDA                | Federal       |            | P330-10-00139    | 04-28-13 *      |
| Utah                | NELAP         | 8          | STLP             | 04-30-14        |
| Virginia            | NELAP         | 3          | 460189           | 09-14-13        |
| West Virginia DEP   | State Program | 3          | 142              | 01-31-14        |
| Wisconsin           | State Program | 5          | 998027800        | 08-31-13        |

TestAmerica Job ID: 490-26469-1

<sup>\*</sup> Expired certification is currently pending renewal and is considered valid.

# **COOLER RECEIPT FORM**



490-26469 Chain of Custody

| Cooler Received/Opened On: 5/11/2013 @0830  |              |  |  |  |  |  |
|---|--------------|--|--|--|--|--|
| 1. Tracking #(last 4 digits, FedEx)   |              |  |  |  |  |  |
| Courier: <u>Fed-Ex</u> IR Gun ID: <u>14740456</u>   |              |  |  |  |  |  |
| 2. Temperature of rep. sample or temp blank when opened:Degrees Celsius                       |              |  |  |  |  |  |
| 3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? | YES NO. NA   |  |  |  |  |  |
| 4. Were custody seals on outside of cooler?   | VESNONA      |  |  |  |  |  |
| If yes, how many and where:   | ·            |  |  |  |  |  |
| 5. Were the seals intact, signed, and dated correctly?  | ESNONA       |  |  |  |  |  |
| 6. Were custody papers inside cooler?   | YES NO NA    |  |  |  |  |  |
| I certify that I opened the cooler and answered questions 1-6 (intial)                        | 9-           |  |  |  |  |  |
| 7. Were custody seals on containers: YES ( and Intact   | YESNO(NA)    |  |  |  |  |  |
| Were these signed and dated correctly?  | YESNO(NA)    |  |  |  |  |  |
| 8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper           | r Other None |  |  |  |  |  |
| 9. Cooling process: (Ce) Ice-pack Ice (direct contact) Dry ice                                | Other None   |  |  |  |  |  |
| 10. Did all containers arrive in good condition (unbroken)?                                   | YES).NONA    |  |  |  |  |  |
| 11. Were all container labels complete (#, date, signed, pres., etc)?                         | ESNONA       |  |  |  |  |  |
| 12. Did all container labels and tags agree with custody papers?                              | ÆSNONA       |  |  |  |  |  |
| 13a. Were VOA vials received?   | YES).NONA    |  |  |  |  |  |
| b. Was there any observable headspace present in any VOA vial?                                | YESNONA      |  |  |  |  |  |
| 14. Was there a Trip Blank in this cooler? (ES).NONA If multiple coolers, sequence            | ce #         |  |  |  |  |  |
| I certify that I unloaded the cooler and answered questions 7-14 (intial)                     | _ W          |  |  |  |  |  |
| 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? | (ES).NONA    |  |  |  |  |  |
| *b. Did the bottle labels indicate that the correct preservatives were used                   | (FES).NONA   |  |  |  |  |  |
| 16. Was residual chlorine present?  | YES. NONA    |  |  |  |  |  |
| I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) | <u> </u>     |  |  |  |  |  |
| 17. Were custody papers properly filled out (ink, signed, etc)?                               | (YES)NONA    |  |  |  |  |  |
| 18. Did you sign the custody papers in the appropriate place?                                 | YES)NONA     |  |  |  |  |  |
| 19. Were correct containers used for the analysis requested?                                  |              |  |  |  |  |  |
| 20. Was sufficient amount of sample sent in each container?                                   | YESNONA      |  |  |  |  |  |
| certify that I entered this project into LIMS and answered questions 17-20 (intial)           |              |  |  |  |  |  |
| I certify that I attached a label with the unique LIMS number to each container (intial)      | _@           |  |  |  |  |  |
| 21. Were there Non-Conformance issues at login? YES. (NO) Was a NCM generated? YES.           | NO.].#       |  |  |  |  |  |

12 13

THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN 37204 Consultant Name: ExxonMobil Everett Terminal City/State/Zip: Everett, MA 02149 Address: 52 Beacham Street 2960 Foster Creighton Nashville Division Toll Free: 800-765-0980 Phone: 615-726-0177 Fax: 615-726-3404 Invoice To: (Exonflobil PM unless otherwise indicated)

Report To: Sperry@triumvirate.com; ernest e havnes@exxonmobil.com TA Account #:

が火のころのび

5-10-13 Ref: S490-9326 Dep: Time /#od Time Received by TestAmerica: Date: 11Mar13 Wgt: 10.00 LBS Received by: SHIPPING: SPECIAL: HANDLING: 51113 Date Date 0000 8888 75 June Time consultant to notify the TestAmerica Project Manager by phone or fax that a rush sample will be submitted. \* It will be the responsibility of ExxonMobil or its QC Deliverables (please circle one) VOCs Free of Headspace? Flow (MGD): 117.0 'n  $\prec$   $\prec$ tup. 17.000 zz

Relinquished by: standard protocol,

Relinquished by

Prepared vsreng 01A

Svgs: PRIORITY OVERNIGHT TRCK: 5566 1440 6145

0.00

TOTAL:

Comments/Special Instructions:

\_aboratory case narative to NELAC Institute

Please see attacked ML's reguisemts.

Laboratory Comments:

Sample Containers Intact? Temperature Upon Receipt:

0,90

Outfall 01 A-TSS - 2 Outfall 01 A-TSS - 3

Trip Blank

n

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HOLD for analysis

1 L Plastic 1 L Plastic

1 L Plastic

HOLD for analysis

Outfall 01 A Outfall 01 A Sample ID or Field ID

5.9.13

610

REQUIREMENTS

Date Sampled

Time Sampled

Grab

Composite

Field Filtered

Sodium Bisulfate

HCI (Blue Label)

Groundwater

Drinking Water

TSS - SM 2540D

BIEX+MIBE

USH TAT (Pre-Schedule)

OTAT request (in Bus. Days)

Due Date of Report

Due Date ... Page 26 of 29

Results (yes or no)

O & G by EPA 1664

Sludge

Soil Other (specify):

NaOH ( Orange Label)

H₂SO₄ Plastic (Yellow Label) H<sub>2</sub>SO<sub>4</sub> Glass(Yellow Label)

Matrix

Monthly

Analyze For

Regulatory District (CA)

City, State, Zip

Site Address SAME

Facility ID#

PROJECT #: NPDES Permit MA0000833

No. of Containers Shipped

May 2013 IST RAIN

Consultant Telephone Number: 617-381-2802

Fax No.: 617-381-2954

Sampler Name: (Print) Sampler Signature:

Visotif

ExxonMobil Project Mgr. Ernest Hayes

Consultant Project Mgr. Triumvirate - Sandra Perry (Call Visoth at (617) 799 - 4357 for sample related questions)

Prepared vsreng 01A

5/28/2013

Loc: 490 **26469** 



| ExxonMobil Everett Terminal NPDES Permit Compliance & | Revision Number: 2               | #1 |
|---|----------------------------------|----|
| Sampling Procedure                                    | Revision Date: 3-22-12           | Α  |
| NPDES Permit #MA0000833                               | Endorsed by:                     |    |
| Prepared by: EMPCo                                    | Procedure Effective Date: 1-1-12 |    |

## Appendix E

# Required MLs for Samples from Outfalls 01A and 01C to Accompany Chain of Custody

Polycyclic Aromatic Hydrocarbons

| Group I                            | Permit Required Minimum Level for Analysis, ug/L |
|------------------------------------|--|
| Benzo(a)anthracene                 | <0.05  |
| Benzo(a)pyrene                     | <0.05  |
| Benzo(b)fluoranthene               | <0.05  |
| Benzo(k)fluoranthene               | <0.05  |
| Chrysene                           | <0.5   |
| Dibenzo(a,h)anthracene             | <0.10  |
| Indeno(1,2,3-cd)pyrene             | <0.10  |
| Group II                           | Permit Required Minimum Level for Analysis, ug/L |
| Acenaphthene                       | <5.00  |
| Acenephthylene                     | <5.00  |
| Anthracene                         | <2.0   |
| Benzo(ghi)perylene                 | <0.2   |
| Fluoranthene                       | <0.50  |
| Fluorene                           | <0.5   |
| Naphthalene                        | <5.00  |
| Phenanthrene                       | <2.00  |
| Pyrene                             | <1.00  |
| Other                              | Permit Required Minimum Level for Analysis, ug/L |
| Available Cyanide                  | <2.0   |
| Mercury                            | <2.0   |
| Methyl Tertiary-Butyl Ether (MTBE) | <5.0   |

Client: Exxon Global Remed. Grp

Job Number: 490-26469-1

Login Number: 26469 List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

| Creator. McDride, Mike   |        |         |
|--|--------|---------|
| Question   | Answer | Comment |
| Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td> | True   |         |
| The cooler's custody seal, if present, is intact.  | True   |         |
| Sample custody seals, if present, are intact.  | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.                             | True   |         |
| Samples were received on ice.  | True   |         |
| Cooler Temperature is acceptable.  | True   |         |
| Cooler Temperature is recorded.  | True   |         |
| COC is present.  | True   |         |
| COC is filled out in ink and legible.  | True   |         |
| COC is filled out with all pertinent information.  | True   |         |
| Is the Field Sampler's name present on COC?  | True   |         |
| There are no discrepancies between the containers received and the COC.                                    | True   |         |
| Samples are received within Holding Time.  | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.   | True   |         |
| Appropriate sample containers are used.  | True   |         |
| Sample bottles are completely filled.  | True   |         |
| Sample Preservation Verified.  | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs                           | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").                            | True   |         |
| Multiphasic samples are not present.   | True   |         |
| Samples do not require splitting or compositing.   | True   |         |
| Residual Chlorine Checked.   | True   |         |
|  |        |         |

TestAmerica Nashville

Client: Exxon Global Remed. Grp

Job Number: 490-26469-1

Login Number: 26469
List Source: TestAmerica Pittsburgh
List Number: 1
List Creation: 05/14/13 11:58 AM

Creator: Watson, Debbie

| Question  | Answer | Comment |
|---|--------|---------|
| Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td> | N/A    |         |
| The cooler's custody seal, if present, is intact.   | True   |         |
| Sample custody seals, if present, are intact.   | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.                            | True   |         |
| Samples were received on ice.   | True   |         |
| Cooler Temperature is acceptable.   | True   |         |
| Cooler Temperature is recorded.   | True   |         |
| COC is present.   | True   |         |
| COC is filled out in ink and legible.   | True   |         |
| COC is filled out with all pertinent information.   | True   |         |
| Is the Field Sampler's name present on COC?   | True   |         |
| There are no discrepancies between the containers received and the COC.                                   | True   |         |
| Samples are received within Holding Time.   | True   |         |
| Sample containers have legible labels.  | True   |         |
| Containers are not broken or leaking.   | True   |         |
| Sample collection date/times are provided.  | True   |         |
| Appropriate sample containers are used.   | True   |         |
| Sample bottles are completely filled.   | True   |         |
| Sample Preservation Verified.   | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs                          | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").                           | N/A    |         |
| Multiphasic samples are not present.  | N/A    |         |
| Samples do not require splitting or compositing.  | N/A    |         |
| Residual Chlorine Checked.  | N/A    |         |

TestAmerica Nashville